

Listing of Claims:

1. (Amended) ~~An~~ A management system of an image forming device, which is structured by the image forming device and a management device for managing the image forming device through a communication network;

the management device comprising a communication unit for sending a data of a computing parameter for conducting an image processing and a data of a set value indicating a computing procedure of the image processing, to the image forming device;

the image forming device comprising:

an image processing circuit for conducting the predetermined image processing for an image data; and

an operating frequency measurement unit for measuring an operating frequency of the image processing circuit;

the image processing circuit comprising:

a plurality of computing modules for conducting the predetermined image processing;

a plurality of output storage circuits connected with each of output stages of the computing modules, the output storage circuits reading and storing an output data from each of the computing modules on a timing of a signal change of a clock signal;

a computing parameter memory circuit for memorizing the data of the computing parameter sent from the management device;

a computing procedure memory circuit for memorizing the data of the set value indicating the computing procedure sent from the management device; and

a selector connected with each of input stages of the computing modules, the selector selectively choosing a data from among a targeted image data of the image processing, the data indicating the computing parameter, and each of the output data of the output storage circuits, in accordance with the set value of the computing procedure stored in the computing procedure memory circuit, and outputting a chosen data to the computing module connected with rearward stages;

the operating frequency measurement unit comprising:
a clock generation unit for generating a clock signal having an optional frequency, for operating the image processing circuit;
and

a clock operation determination unit for determining whether the image processing circuit normally operates by the clock signal generated by the clock generation unit;

wherein the image forming device conducts an operating test of the image processing circuit by the operating frequency measurement unit on the basis of the data of the computing parameter and the data of the set value indicating the computing procedure, and sends a test result of the operating test to the management device.

2. (Original) The management system of claim 1, wherein the test result of the operating test is a maximum operating frequency which is operable in the image processing circuit.

3. (Original) The management system of claim 1, wherein the management device comprises:

an information storage unit for storing information related to various operating tests which is conducted in the image forming device; and

a toll computing unit for computing a management expense imposed on the image forming device on the basis of the information stored in the information storage unit.

4. (Amended) ~~An~~ A management system of an image forming device, which is structured by the image forming device and a management device for managing the image forming device through a communication network;

the management device comprising a communication unit for sending a signal designating an operating test to the image forming device;

the image forming device comprising:
a image processing circuit for conducting a predetermined image processing for an image data for test in accordance with an operating test designation signal from the management device;

an image forming unit for conducting an image forming on the basis of the image data for test in which the image processing is conducted; and

a read unit for reading an image formed by the image forming unit;

the image processing circuit comprising:

a characteristic point detection unit for detecting a characteristic point of the image from the image read by the read unit;

a displacement computing unit for computing an amount of a displacement of the image from the characteristic point of the image detected by the characteristic point detection unit; and

a correction processing unit for conducting a processing for correcting the amount of the displacement of a targeted image of a print out on the basis of the amount of the displacement computed by the displacement computing unit.

5. (Original) The management system of claim 4, wherein the image forming unit comprises a photo conductor, and the image formed by the image forming unit is a toner image formed on the photo conductor.

6. (Original) The management system of claim 5, wherein the read unit reads the toner image on the photo conductor.

7. (Original) The management system of claim 4, wherein the image forming unit conducts the image forming on a duplex paper on the basis of the image data for test in which the image processing is conducted.

8. (Amended) ~~An~~ A management system of an image forming device, which is structured by the image forming device and a management device for managing the image forming device through a communication network;

the management device comprising a communication unit for sending a data of a computing parameter for conducting an image processing and a data of a set value indicating a computing procedure of the image processing, to the image forming device;

the image forming device comprising:
an image processing circuit for conducting the predetermined image processing for an image data;
an image forming unit for conducting an image forming on the basis of the image data in which the image processing is conducted; and

a read unit for reading an image formed by the image forming unit;

the image processing circuit comprising:

a plurality of computing modules for conducting the predetermined image processing;

a plurality of output storage circuits connected with each of output stages of the computing modules, the output storage circuits reading and storing an output data from each of the computing modules on a timing of a signal change of a clock signal;

a computing parameter memory circuit for memorizing the data of the computing parameter sent from the management device;
a computing procedure memory circuit for memorizing the data of the set value indicating the computing procedure sent from the management device; and

a selector connected with each of input stages of the computing modules, the selector selectively choosing a data among from a targeted image data of the image processing, the data indicating the computing parameter, and each of the output data of the output storage circuits, in accordance with the set value of the computing procedure stored in the computing procedure memory circuit, and outputting a chosen data to the computing module connected with rearward stages;

wherein in the image forming device, by the image processing circuit, the image processing is conducted for an image data for test on the basis of the data of the computing parameter sent from the management device and the data of the set value indicating the computing procedure, and by the image forming unit, the image forming is conducted on the basis of the image

data in which the image processing is conducted, and by an image read unit, a formed image is read, and by comparing a read image and a predetermined expected image, a comparison result is sent to the management device.

9. (Original) The management system of claim 8, wherein the image forming unit comprises a photo conductor, and the image formed by the image forming unit is a toner image formed on the photo conductor.

10. (Original) The management system of claim 9, wherein the read unit reads the toner image on the photo conductor.

11. (Original) The management system of claim 8, wherein the image forming unit conducts the image forming on a duplex paper on the basis of the image data in which the image processing is conducted.

12. (New) The management system of claim 8, wherein:
the image forming device further comprises an operating frequency measurement unit to measure an operating frequency of the image processing circuit, the operating frequency measurement unit comprising:

a clock generation unit to generate a clock signal having an optional frequency, for operating the image processing circuit; and

a clock operation determination unit to determine whether the image processing circuit normally operates by the clock signal generated by the clock generation unit, and wherein:

the image forming device further comprises a communication unit to send the management device a determination result determined by the clock operation determination unit.

13. (New) The management system of claim 8, wherein the image processing circuit further comprises:

a characteristic point detection unit to detect a characteristic point of the image read by the read unit;

a displacement computing unit to compute an amount of a displacement of the image from the characteristic point of the image detected by the characteristic point detection unit; and

a correction processing unit to correct a displacement of an image to be printed out on the basis of the amount of the displacement computed by the displacement computing unit, and wherein:

Application Serial No. 10/773,369
Response to Office Action

Customer No. 01933

the image forming unit prints out the image whose
displacement is corrected by-the correction processing unit.